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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/055,712	04/07/1998	HYOUNG-JOO LEE	1317.1028/MD	4304

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EXAMINER

BUI, KIEU OANH T

ART UNIT	PAPER NUMBER
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2611

DATE MAILED: 05/22/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/055,712

Applicant(s)

LEE, HYOUNG-JOO

Examiner

KIEU-OANH T BUI

Art Unit

2611

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 February 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-17,20-31 and 33-35 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-17,20-31 and 33-35 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Acknowledgment

1. Claims 2, 19, and 32 were previously canceled without prejudice in the amendment B (Paper No. 8) as the result of the Request for Continued Prosecution Application dated 7/27/01 (Paper No. 10) and claim 18 was canceled without prejudice in the amendment C (Paper No. 13) which has been recently filed and entered.

Response to Arguments

2. Applicant's arguments with respect to claims 1, 3-17, 20-31, and 33-35 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 1, 3-7, 10-17, 20-24, 28-31, and 33-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Young et al. (U.S. Patent No. 5,727,060) in view of Hendricks et al. (U.S. Patent No. 5,734,853).

Regarding claims 1 and 33-35, Young et al (or "Young" hereinafter) disclose a method of displaying a program progress time on a signal receiver, i.e., on a graphical interface screen (Fig. 10/item 72) which receives and processes program guide information containing a program schedule (col. 1/lines 20-30), comprising the steps of:

(a) storing the program guide information, i.e., to a schedule memory (Fig. 22A/item 232);

(b) setting a command of the signal receiver which is commonly usable by a user as a display command to display time information about a currently viewed program, i.e., a program with the display time information (the display time information such as the running time or the elapsed time are displayed on demand for the user (as in Figs. 6 & 10 and col. 8/lines 45-65); and

(c) displaying the time information about the currently viewed program together with the currently viewed program when the user issues the display command set in said step (b), i.e. user uses a Select command for displaying the information (Fig. 10, and col. 8/line 66-col. 9/line 10), the time information comprising a beginning time with respect to the currently viewed program, i.e., as illustrated in Fig. 12 when a currently viewed program displaying on screen 74 with its information as "Judge 30 Min" as the beginning time related to that program; as well as "receiving program guide information containing a program schedule" as cited in claim 34 (Young, Figs. 6-7) and "the time information including a beginning time, a current time, and a terminating time of the currently viewed program" (Fig. 10/items 72 for running time including Start time or the beginning time and Finish time or terminating time and "11:00 A" on panel 62 for a current time). Young does not clearly further show the step of "d) displaying next program information when a remaining program time reaches a preset time" as amended; however, the technique of reserving a preset time or a time interval whenever the user watches an existing program reaching the preset time, e.g., a fifteen minutes ahead of a program, for displaying the next program information is taught by Hendricks as Hendricks shows in Figure 17 at the time 7:45PM, a next program information for the program "Terminator 4" is shown to viewer with the indication of next start time at 8:00 PM as the set top terminal automatically determining which channel will next to show the program with an internal clock (see Fig. 17, and col. 35/line 37 to col. 36/line 9).

Therefore, it would have been obvious to modify Young's remaining time program progressing bar with Hendricks' teaching technique of displaying the next program information when a remaining (existing) program time reaches a preset time in order to obtain an enhanced technique in displaying a program progress time on a signal receiver including the step of "displaying next program information when a remaining program time reaches a preset time" for the viewer to preview the next program information for the upcoming program as desired.

As for claims 3 and 4, the steps of "wherein the time information is a program terminating time of the currently viewed program" and "wherein the time information further comprises a current time with respect to the currently viewed program" are taught by Young as Young suggests that the running time, which means the starting time and the terminating time, is included in the overlay 52 (Fig. 10/ item 72 and col. 8/lines 60) and the current time shown as at "11:00 AM" with respect to currently viewed program on display 66 (Fig. 10).

Concerning claims 5 and 6, Young discloses the step of "wherein the time information includes the program progress time determined by subtracting the beginning time from the current time" and "wherein the time information further comprises the remaining program time determined by subtracting the current time from the program terminating time" as Young discloses a progressing bar for indicating the elapsed time of the currently playing program from the start until the end (Fig. 6/item 72).

Regarding claim 7, in view of claim 1 above, Young discloses a method of displaying a program progress time on a signal receiver, i.e., on a graphical interface screen (Fig. 10/item 72) which receives and processes program guide information containing a program schedule (col. 1/lines 20-30), comprising the steps of: storing the program guide information, i.e., to a schedule memory (Fig. 22A/item 232), and displaying the time information about the currently viewed program when the user issues the display command set in said step (b), i.e, user uses a Select command for displaying the information (col. 8/line 66-col. 9/line 10).

Young does not clearly show the step of “d) displaying next program information when a remaining program time reaches a preset time” as amended; however, the technique of reserving a preset time or a time interval whenever the user watches an existing program reaching the preset time, e.g., a fifteen minutes ahead of a program, for displaying the next program information is taught by Hendricks as Hendricks shows in Figure 17 at the time 7:45PM, a next program information for the program “Terminator 4” is shown to viewer with the indication of next start time at 8:00 PM as the set top terminal automatically determining which channel will next to show the program with an internal clock (see Fig. 17, and col. 35/line 37 to col. 36/line 9).

Therefore, it would have been obvious to modify Young’s remaining time program progressing bar with Hendricks’ teaching technique of displaying the next program information when a remaining (existing) program time reaches a preset time in order to obtain an enhanced technique in displaying a program progress time on a signal receiver including the step of “displaying next program information when a remaining program time reaches a preset time” for the viewer to preview the next program information for the upcoming program as desired.

As for claims 10, Young also teaches “wherein the commonly usable command of the signal receiver is a command for a channel up/down” because the program note including the progressing time is in the overlay portion, and when the user sends the command by pressing the channel up/down, the overlay portion will display its content correspond to the up/down channel (see Fig. 11 for setting up the program note; Fig. 21/items 136 for controlling up/down channel and col. 8/lines 46-65 for how to use the program note).

As for claim 11, the step of “wherein the commonly usable command of the signal receiver is a command for a remote controller event” is taught by Young (see 22B/item 212).

Regarding claim 12, in further view of claim 1 above, Young discloses a method of displaying a program progress time on a signal receiver, i.e., on a graphical interface screen (Fig. 10/item 72) which receives and processes program guide information containing a program schedule (col. 1/lines 20-30), comprising the steps of: storing the program guide information, i.e., to a schedule memory (Fig. 22A/item 232), and displaying the time information about the currently viewed program when the user issues the display command set in said step (b), i.e., user uses a Select command for displaying the information (col. 8/line 66-col. 9/line 10). Young further reveals to include the step of "judging that the command for displaying the program progress time is issued by the user so as to display the program progress time at a preset time set by the user prior to a program terminating time of the currently viewed program" as the user can activate or deactivate, i.e., by toggling On or OFF, the program note including the progress time bar (col. 9/line 1) and by setting up the preset time period in the menu for the starting time and the terminating time as desired (Fig. 25 and col. 24/lines 3-13; and see claims 1 and 7 above).

Regarding claims 13-16, these method claims with the combination of claimed steps are rejected for the reasons given in the scope of claims 1, and 3-7 as already disclosed above.

Regarding claims 17 and 29, Young discloses a method of displaying a program progress time of a currently viewed program of a signal receiver, i.e., on a graphical user interface screen (Fig. 10), the method comprising the steps of: receiving program guide information including a program schedule having the currently viewed program (Fig. 10/item 70 for the program guide information); and displaying the program progress time of the currently viewed program simultaneously with the currently viewed program in response to a command from a user to perform a function other than displaying the program progress time upon receipt of the command, the program progress time including a current time, i.e., the user can view the currently displaying program at the time with the progress time (Fig. 10 with the progress time bar indicating the running time of the program at the mark 72, and the display also shows a

current time at that point (as shown "11:00 A" in Fig. 10 as the current time of the program). Young further reveals the steps of "wherein the command is one of an activating a channel up/down key, determining an occurrence of a remote controller event, and setting of a preset time prior to a program termination of the currently viewed program" (see claims 7, and 10-12 above).

Regarding claim 20, the steps of "generating a setup display for the user to designate ones of a plurality of commands to function as the command to perform the function other than displaying the program progress time upon receipt of the command" and "receiving inputs from the user designating the ones of the plurality of the commands to function as the command to perform the function other than displaying the program progress time upon receipt of the command" are taught by Young as Young indicates other functions for the user to command such as What's On TV, What's on Tape, Recordings, Themes and etc. (Figs. 4, 7-8, 11, 13).

As for claims 21 and 30, in view of claim 17 above, Young discloses a method of displaying a program progress time of a currently viewed program of a signal receiver, i.e., on a graphical user interface screen (Fig. 10), the method comprising the steps of: receiving program guide information including a program schedule having the currently viewed program (Fig. 10/item 70 for the program guide information); and displaying the program progress time of the currently viewed program in response to a command from a user to perform a function other than displaying the program progress time upon receipt of the command, i.e., the user set the display notes ON, not the program progress time, but the display is included the status of the program progress time (col. 6/lines 46-65). Young further discloses the step of "displaying next program information of a next program on a same channel as the currently viewed program at the preset time prior to the program termination of the currently viewed program" (Fig. 6/item 52 & Fig. 7).

As for claim 22, the steps of “generating a setup display for the user to designate ones of a plurality of commands to function as the command to perform the function other than displaying the program progress time upon receipt of the command, wherein the plurality of commands further comprises displaying the program progress time at a preset time prior to a program termination of the currently viewed program, and for the user to designate another command to display next program information on a same channel as the currently viewed program at the preset time; receiving inputs from the user designating whether the ones of the plurality of the commands are to function as the command to perform the function other than displaying the program progress time upon receipt of the command; and displaying the next program information at the preset time if the first and the another commands are set by the user positively” is suggested by Young as Young allows users to set up the start time and end time of the program(s) and the displaying of the program notes including the program progress time (Fig. 25, col. 8/lines 46-65 and col. 23/line 60 - col.24/line 13; and Hendricks, see claims 1 and 7 above).

As for claims 23 and 24, Young teaches “wherein the program progress time further includes a program beginning time and a program termination time of the currently viewed program” as Young reveals to include the running time of a program including the starting time and the finishing time as shown on the status bar (Fig. 10/item 72, and col. 8/lines 59-60); and “wherein the program progress time further includes a channel number, a name of a broadcast station and a title of the currently viewed program”, i.e., Cosby Show (Title) is currently broadcasting on channel 2 (channel number) and by KNTV-FOX (name of a broadcast station) (Fig. 10).

Regarding claim 28, Young teaches a device for displaying a program progress time, comprising: a receiving unit to receive a TV program and a TV program guide containing a program schedule which includes information on the TV program (Figs. 22A & 22B); a user

interface to enable entry of a command from a user requesting display of the program progress time (Fig. 22B/item 212); an audio output unit to generate an audio signal of the TV program, i.e., TV program is played at the TV monitor using cable decoder and tuner (Fig. 22A); a processor to produce On-Screen-Graphic data for displaying the program progress time in response to the command from the user and based upon the program schedule (col. 8/lines 45-65 and Fig. 10/item 72); a video output unit to mix video data of the TV program and On-Screen-Graphic data of the TV program, to output a resulting signal; and a display to display the resulting signal (Fig. 22A/at items 224 7 226 to provide outputs to item 210).

Regarding claim 31, Young reveals "a method of displaying a program progress time of a currently viewed program comprising: issuing a user-initiated display command; and displaying a program terminating time of the currently viewed program at a preset time set by the user prior to a program terminating time of the currently viewed program", i.e., the display time information such as the running time including the termination time are displayed on demand for the user (as in Figs. 6 & 10 and col. 8/lines 45-65) and the time left on the program prior to a program terminating time shown of the currently viewed program is further revealed (Fig. 13/item 90).

5. Claims 8-9 and 25-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Young et al. (U.S. Patent No. 5,727,060) in view of Hendricks et al (U.S. Patent 5,734,853) and Jennings, Jr. et al (U.S. Patent No. 5,542,088).

Regarding claims 8-9 and 25-27, Young suggests to include a percentage calibrated time bar for indicating the percentage of the progressive program (as in Fig. 10/item 72 and col. 10/lines 27-35), but Young and Hendricks do not clearly includes a percentage number as "wherein the time information further comprises a percentage of the program progress time as compared with a total program broadcasting time calculated by subtracting the beginning time

from the program terminating time”; “wherein the time information further comprises a percentage of the remaining program time as compared with the total program broadcasting time”; “wherein said displaying step comprises the step of displaying the program beginning time at a start of a display bar, the program termination time at end of the display bar, and the current time at a position of the display bar corresponding to a percentage of time elapsed versus a total time of the currently viewed program; wherein said displaying step further comprises the step of displaying a first percentage number of the time elapsed and a second percentage number of a time remaining versus the total time of the currently viewed program” and “wherein the command is to display the program progress time automatically at a preset time prior to a program termination of the currently viewed program”; however, the technique of displaying a progressive time bar together with the percentage numbers of indicating how much percentage of the program is completed and the setting of a function to perform at a preset time is known in the art. In fact, Jennings et al (or “Jennings” hereinafter) disclose a same technique of displaying a status bar with its percentage numbers for indicating how many percentage of the program is completed (Jennings, Fig. 2 and col. 6/lines 20-26). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Young’s suggested percentage calibrated time bar with Jennings’ percentage numbers next to that progressive time bar in order to clearly indicate how many percent of the program is being completed. The motivation for doing this is to offer a clear and precise visual notification to users about the currently viewing program being broadcasted as well as the remaining time of that program in terms of percentage numbers instead of an estimation as taught by Young’s progressive calibrated time bar.

Conclusion

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

7. **Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(703) 872-9314, (for Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA., Sixth Floor (Receptionist).


8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Krista Kieu-Oanh Bui whose telephone number is (703) 305-0095. The examiner can normally be reached on Monday- Friday from 9:00 AM to 6:00 PM, with alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Faile, can be reached on (703) 305-4380.

Application/Control Number: 09/055,712
Art Unit: 2611

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

Krista Bui
Art Unit 2611
May 15, 2001


ANDREW FAILE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600